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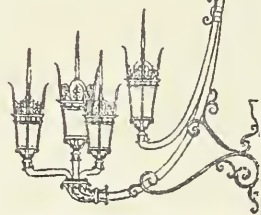
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South Boston Piers/Fort Point Channel

Transit Project

Briefing Materials



Massachusetts Bay
Transportation Authority

September 1991



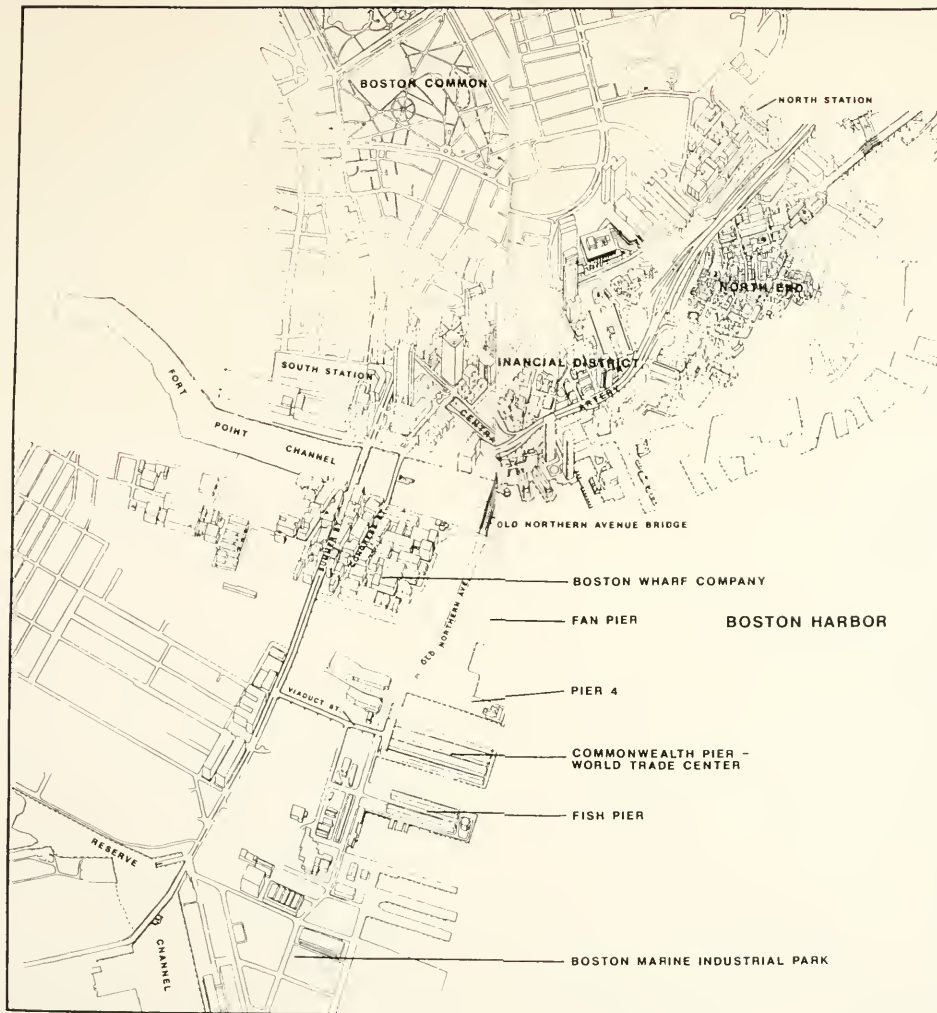
SOUTH BOSTON PIERS/ FORT POINT CHANNEL TRANSIT PROJECT PURPOSE

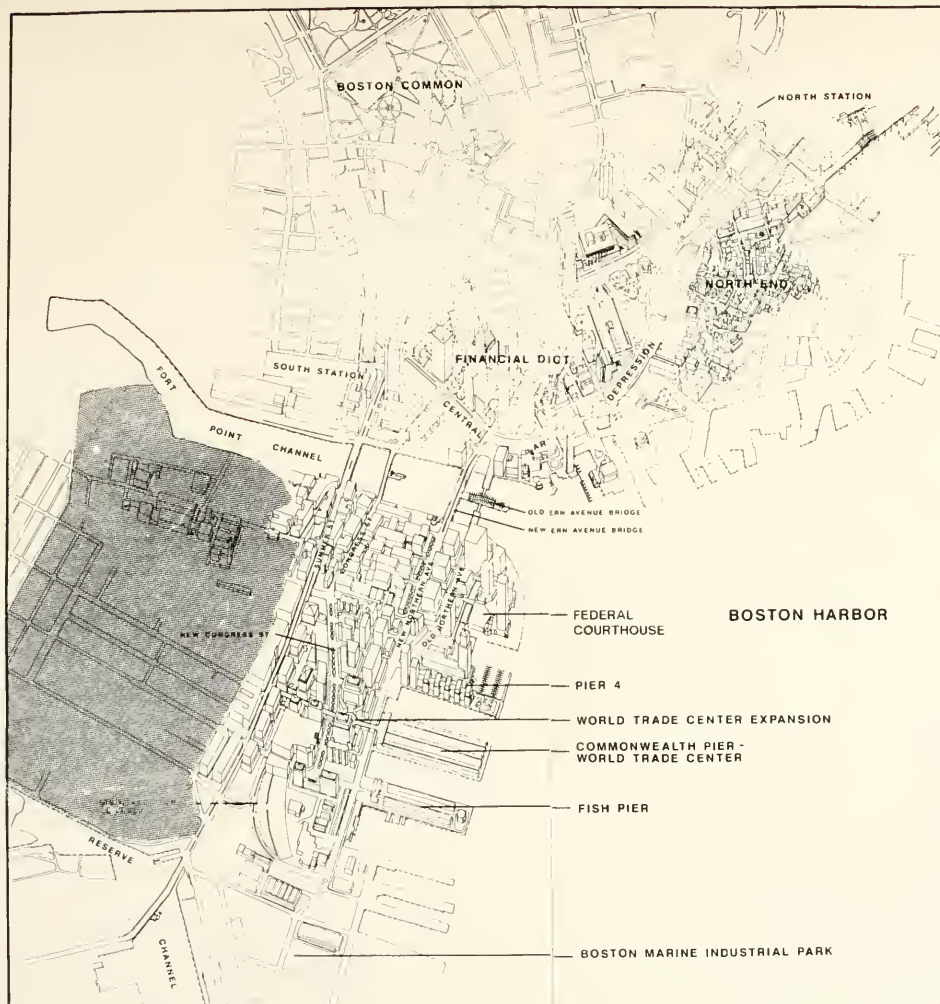
- To Respond to and Support Public and Private Economic Development Initiatives in the South Boston Piers Area.**
- To Ensure Acceptable Environmental Outcomes While Protecting Investments in the Regional Highway System, Particularly the Central Artery (I-90)/Third Harbor Tunnel (I-93) Project, by Encouraging Transit-Oriented Development Patterns.**
- To Implement Transit Service in a Manner that is Responsive to Fiscal Constraints at the MBTA.**



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<http://www.archive.org/details/southbostonpiers1991mass>





South Boston Industrial
Development Area

South Boston Piers/
Fort Point Channel
Transit Alternatives
URS Consultants, Inc.

Prepared By:
CBT/Childs Bertman Tseckares & Casendino Inc.

Downtown and South Boston
Piers- 2010

LAND USE PLANNING AND TRIP GENERATION

**Developed
Square Footage
(000s)** **Peak Hour
Trips** **Daily
Trips**

	1986	2010	1986	2010	1986	2010
South Boston Piers	9,000	22,000	7,000	20,000	40,000	90,000
Midtown	12,000	18,000	20,000	30,000	120,000	200,000

TRANSIT PROJECT

PROGRESSION OF ALTERNATIVES STUDIED

FEASIBILITY STUDY

DEIR

DEIS

CONVENTIONAL SURFACE BUS

SOUTH BOSTON TO SOUTH STATION
SOUTH BOSTON TO GOVERNMENT CENTER

NO ACTION

NO ACTION

ELEVATED PEOPLE MOVER

SOUTH BOSTON TO SOUTH STATION
SOUTH BOSTON TO AQUARIUM,
HAYMARKET AND NORTH STATION

BUS TSM

BUS/TSM

SURFACE LIGHT RAIL

UNDERGROUND TRANSITWAY

SOUTH STATION TO FAN
PIER (MOST)

UNDERGROUND PEOPLE MOVER

SOUTH BOSTON TO BOYLSTON STATION
SOUTH BOSTON TO DOWNTOWN CROSSING

ELEVATED PEOPLE MOVER

SOUTH STATION TO WTC
(MOS2)

BOYLSTON STATION TO
WTC (FULL BUILD)

GUIDED BUS

SOUTH BOSTON TO BOYLSTON
STATION VIA N. E. MEDICAL CENTER
ON SURFACE OR IN TUNNEL
UNDER I-90

UNDERGROUND TRANSITWAY

LIGHT RAIL

TRACKLESS TROLLEY

DUAL MODE BUS

PEOPLE MOVER

RED LINE RELOCATION

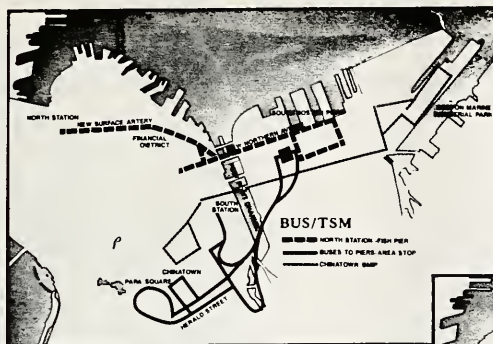
BROADWAY TO SOUTH STATION
VIA CONRAIL CUT OR
SEAPORT ACCESS HIGHWAY

RED LINE LOOP (RELOCATION)

COMMUTER RAIL SHUTTLE

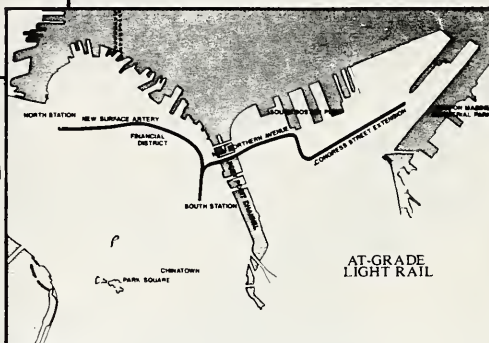
DENOTES ALTERNATIVE CARRIED OVER INTO SUBSEQUENT PHASE

DENOTES ALTERNATIVE CARRIED OVER INTO SUBSEQUENT PHASE

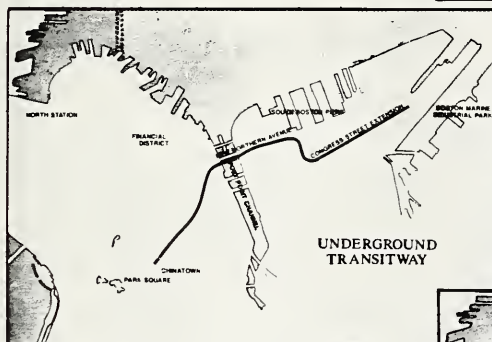


Bus/TSM

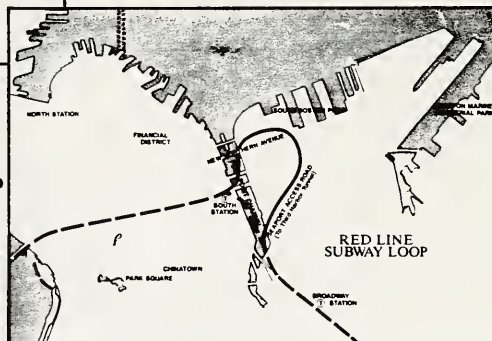
At-Grade Light Rail

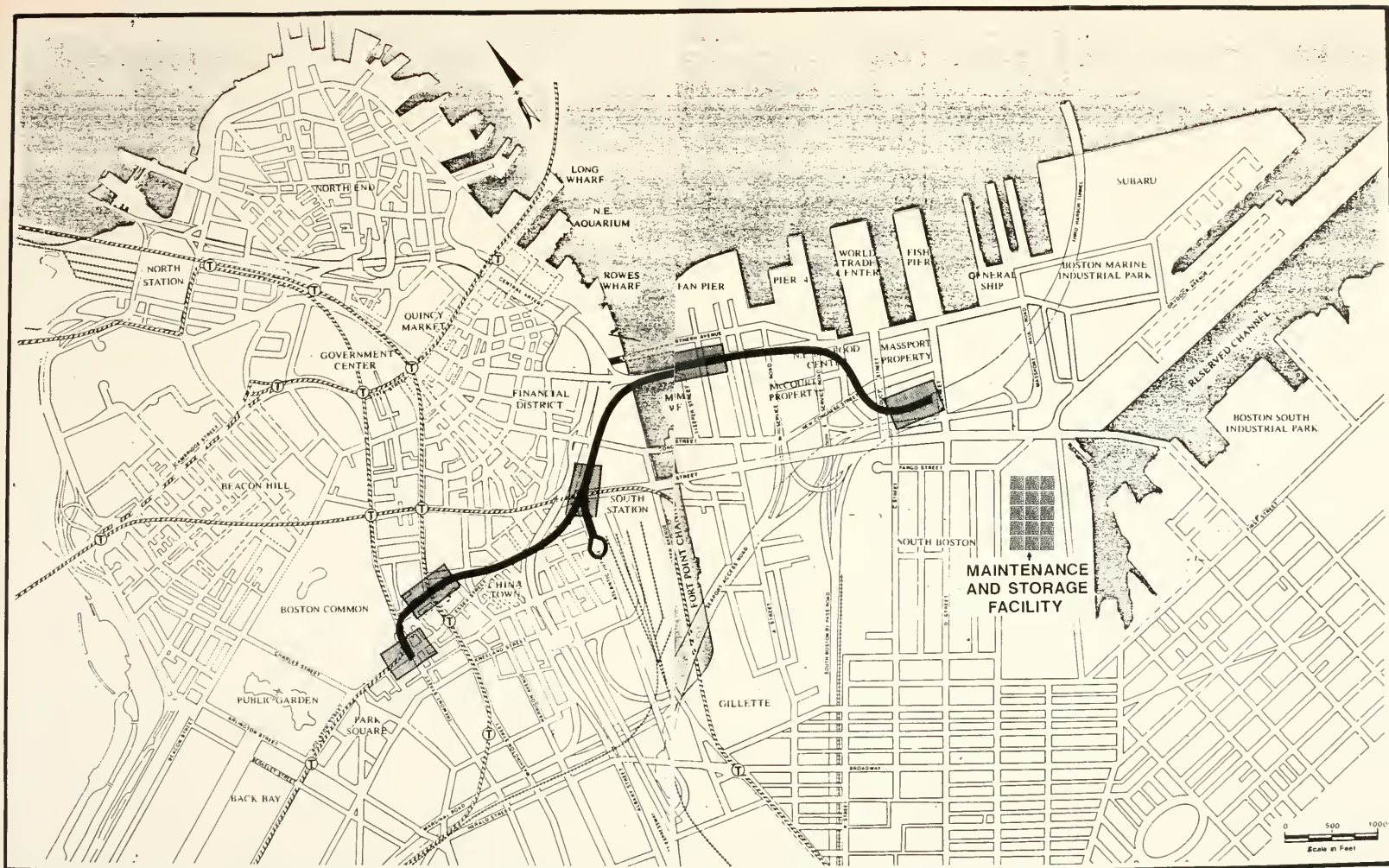


Underground Transitway

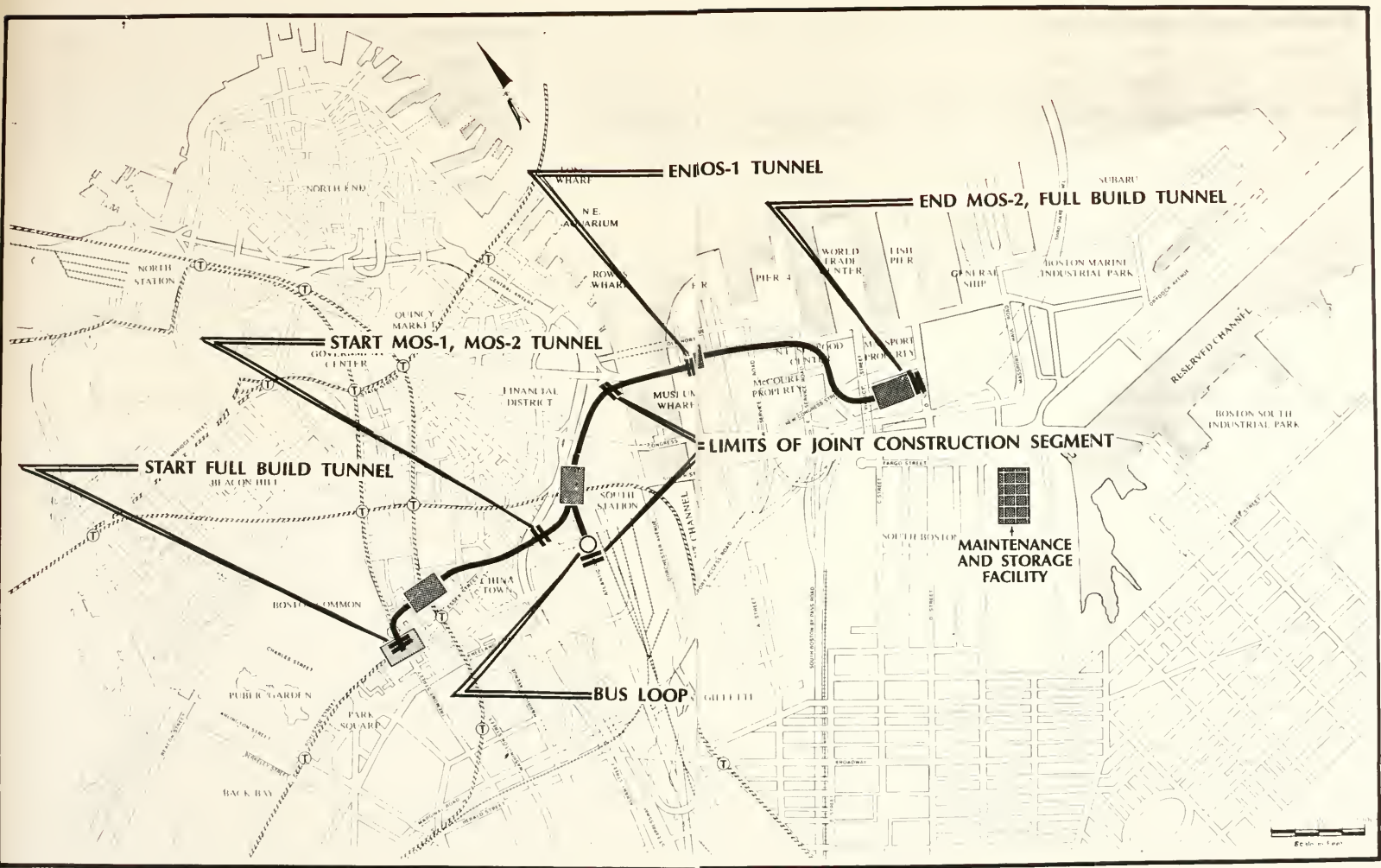


Red Line Subway Loop





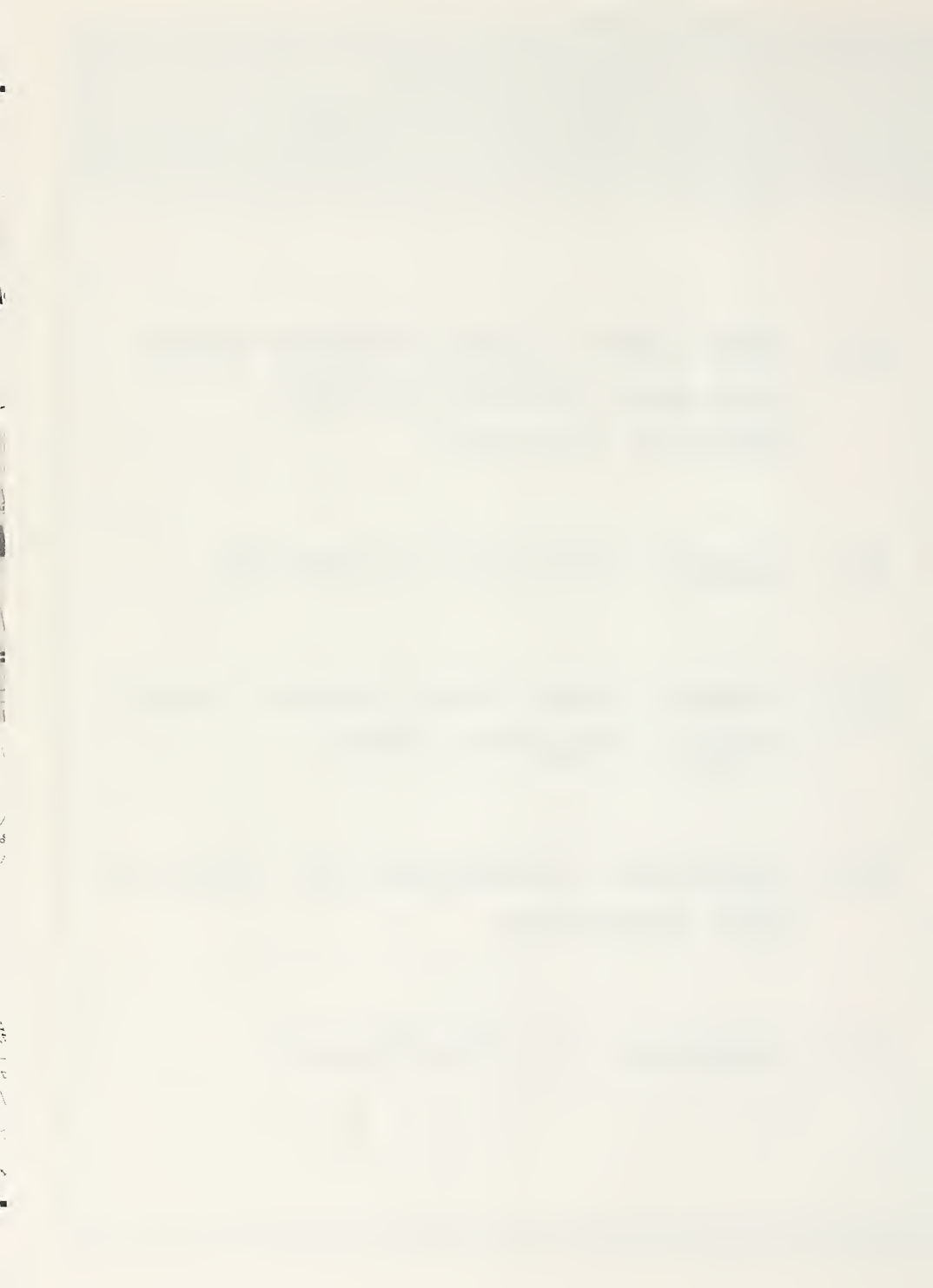
DEIS Alternative
Fort Point Channel
Underground Transitway



Fort Point Channel
Underground Transitway
Alternatives

TRANSITWAY - KEY POLICY FEATURES

- ☐ **Only MBTA Capital Project which
Leverages DISCRETIONARY
FEDERAL DOLLARS**
- ☐ **Flexible Intermodal Investment**
- ☐ **Central Artery/Third Harbor Tunnel
Project Mitigation Action**
- ☐ **Significant Contribution to 1999 SIP
VMT Reduction**
- ☐ **Laboratory for Privatization**



ADVANTAGES OF THE TRANSITWAY

- ☐ **Incremental Implementation**
- ☐ **Long-Term Expansion**
- ☐ **Highest Transit Ridership
to the Piers Area**
- ☐ **Transit Service to Midtown and
Other Markets**
- ☐ **Integration with Other Services
and Intermodal Potential**

2010 TRANSITWAY DAILY TRANSIT RIDERSHIP AND MODE SHARE TO THE SERVICE AREA

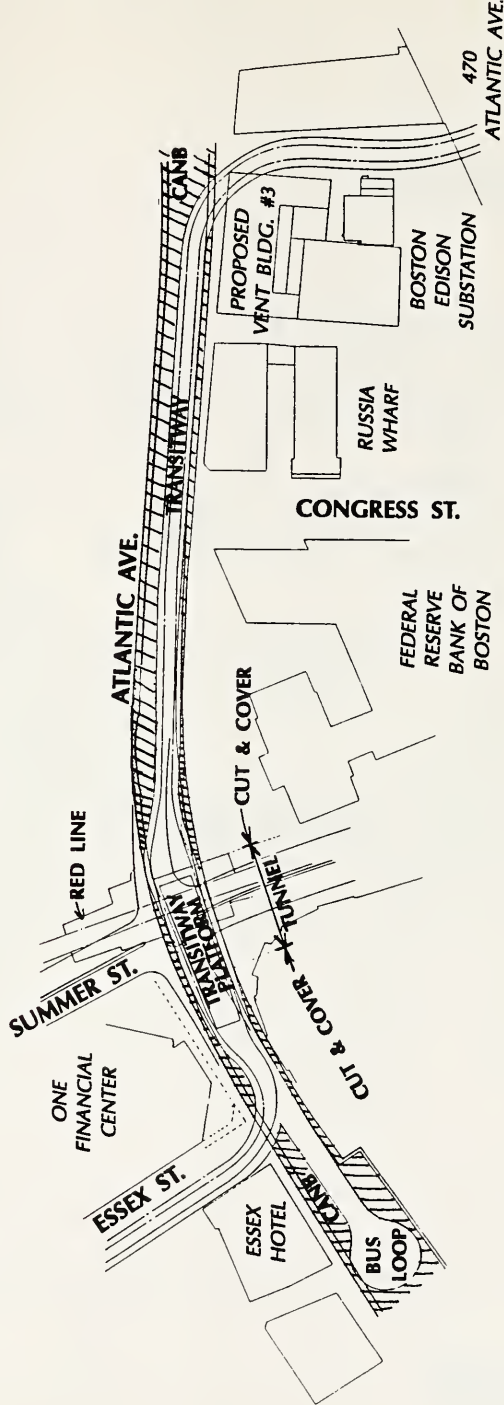
	Transit Trips	Transit Mode Share*	Auto Vehicle Trips Diverted
Daily	40,500	44%	8,330
Peak Hour	12,200	63%	3,770


Total Annual Ridership = 23,900,000**

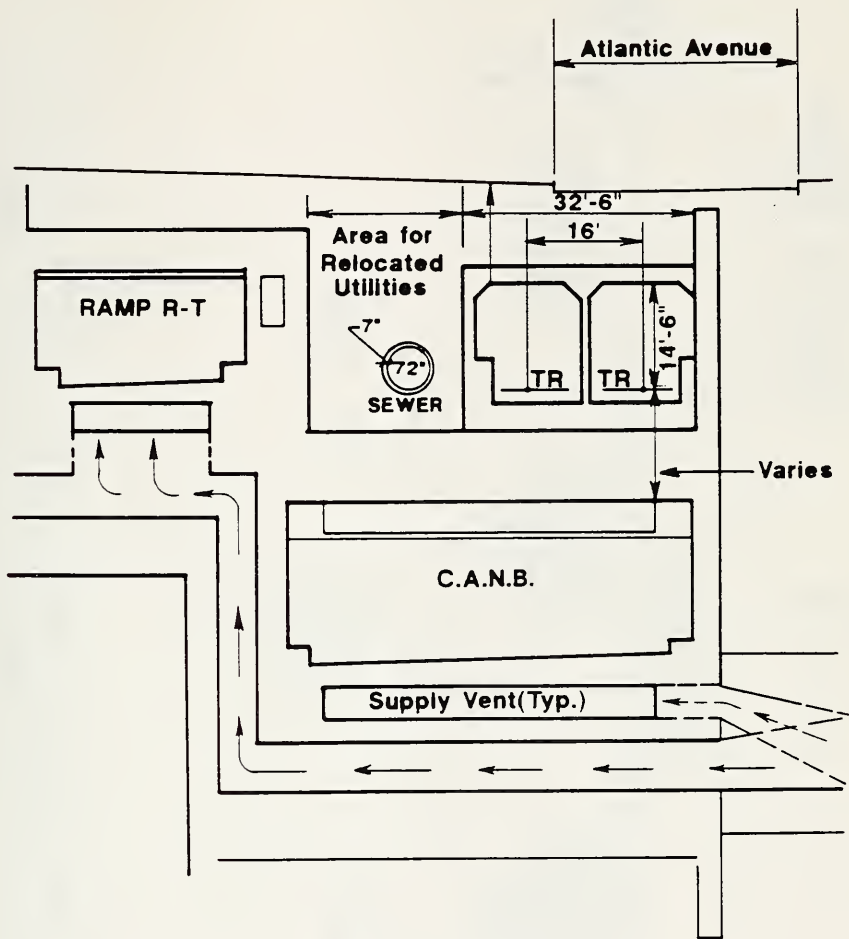
* Mode shares are predicated upon the Metropolitan Planning Organization's proposed South Boston Parking Freeze

** Inbound plus outbound, including estimated weekend ridership

PLAN OF UNDERGROUND TRANSITWAY OVER NORTHBOUND CENTRAL ARTERY



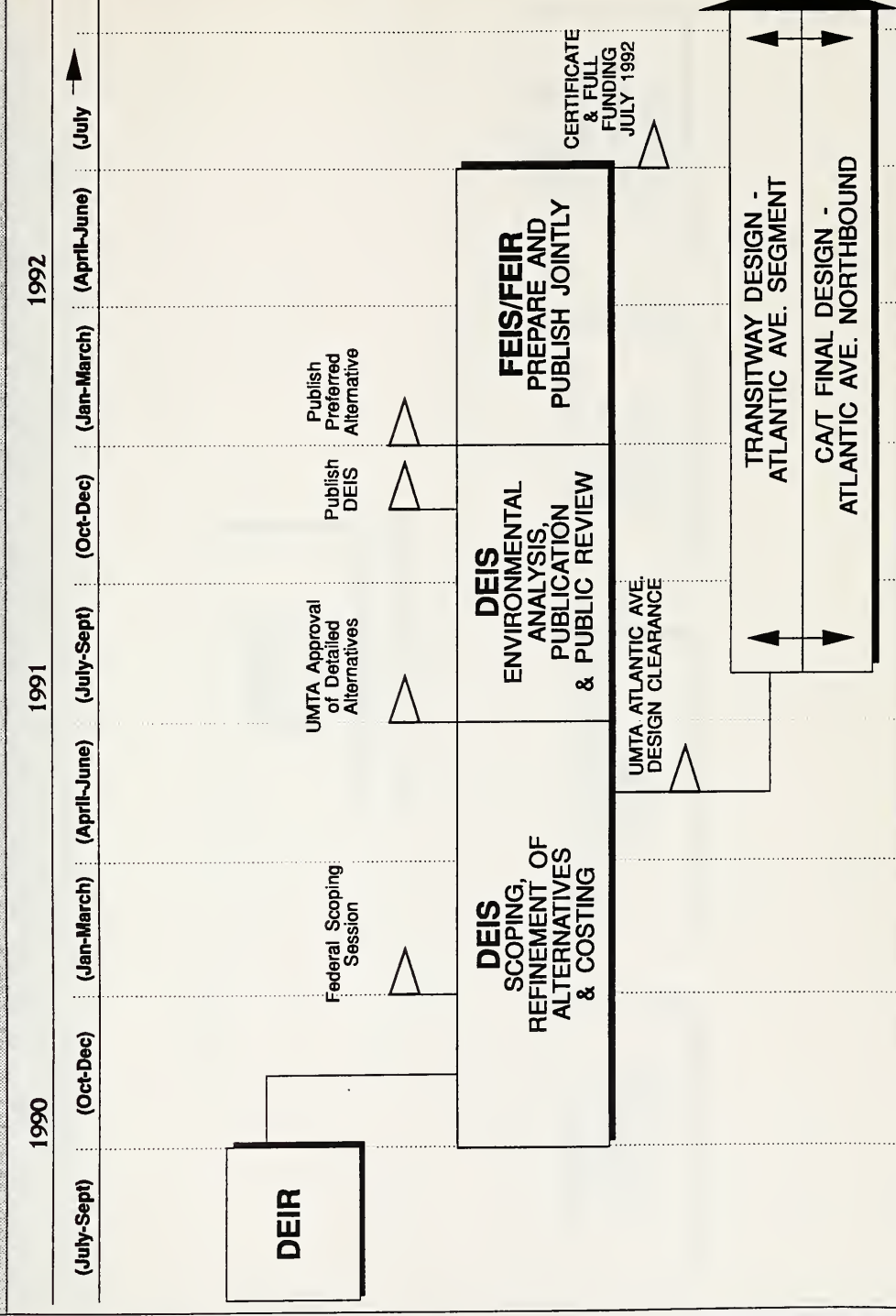
 CENTRAL ARTERY - NORTHBOUND



Underground Transitway-
Typical Section, Over
Northbound Central Artery

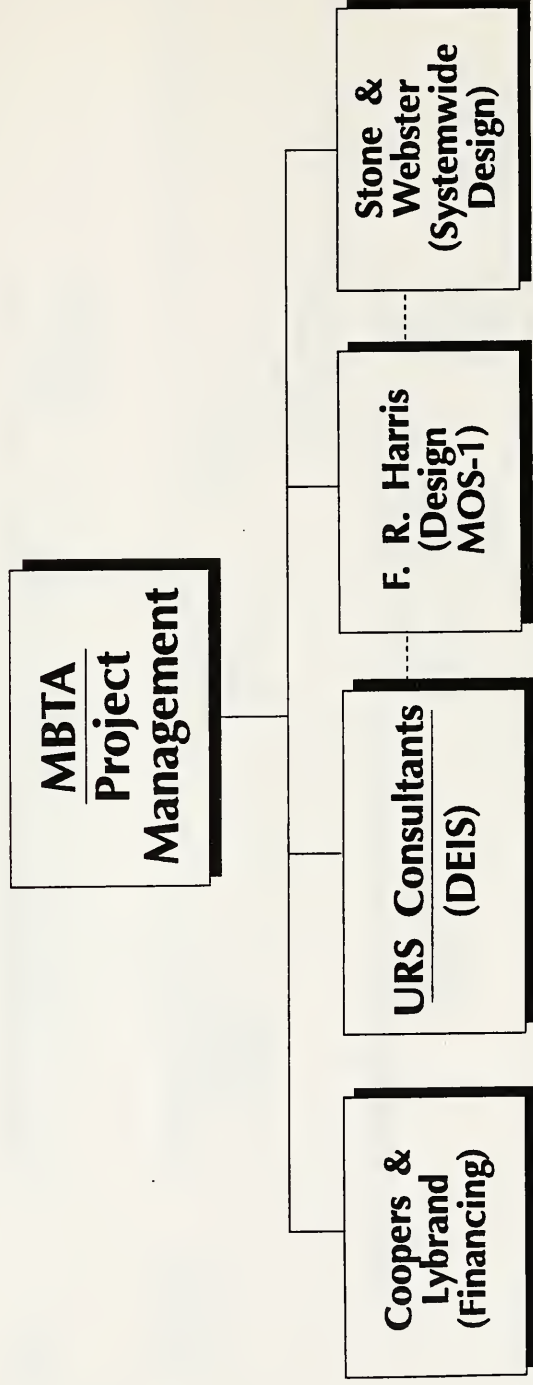


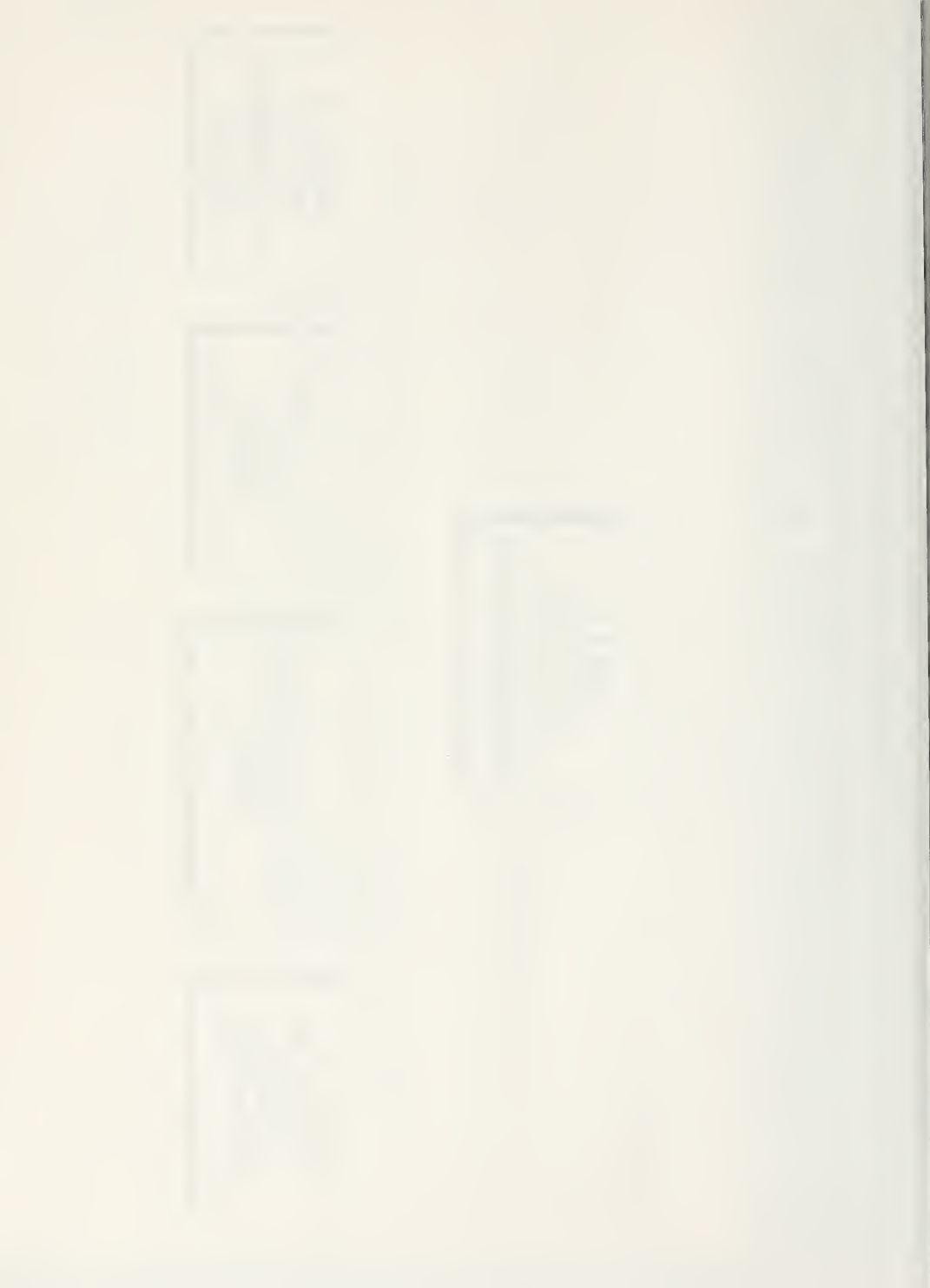
TIMEFRAME AND ACTIVITY SEQUENCE SOUTH BOSTON PIERS/FORT POINT CHANNEL AA/DEIS



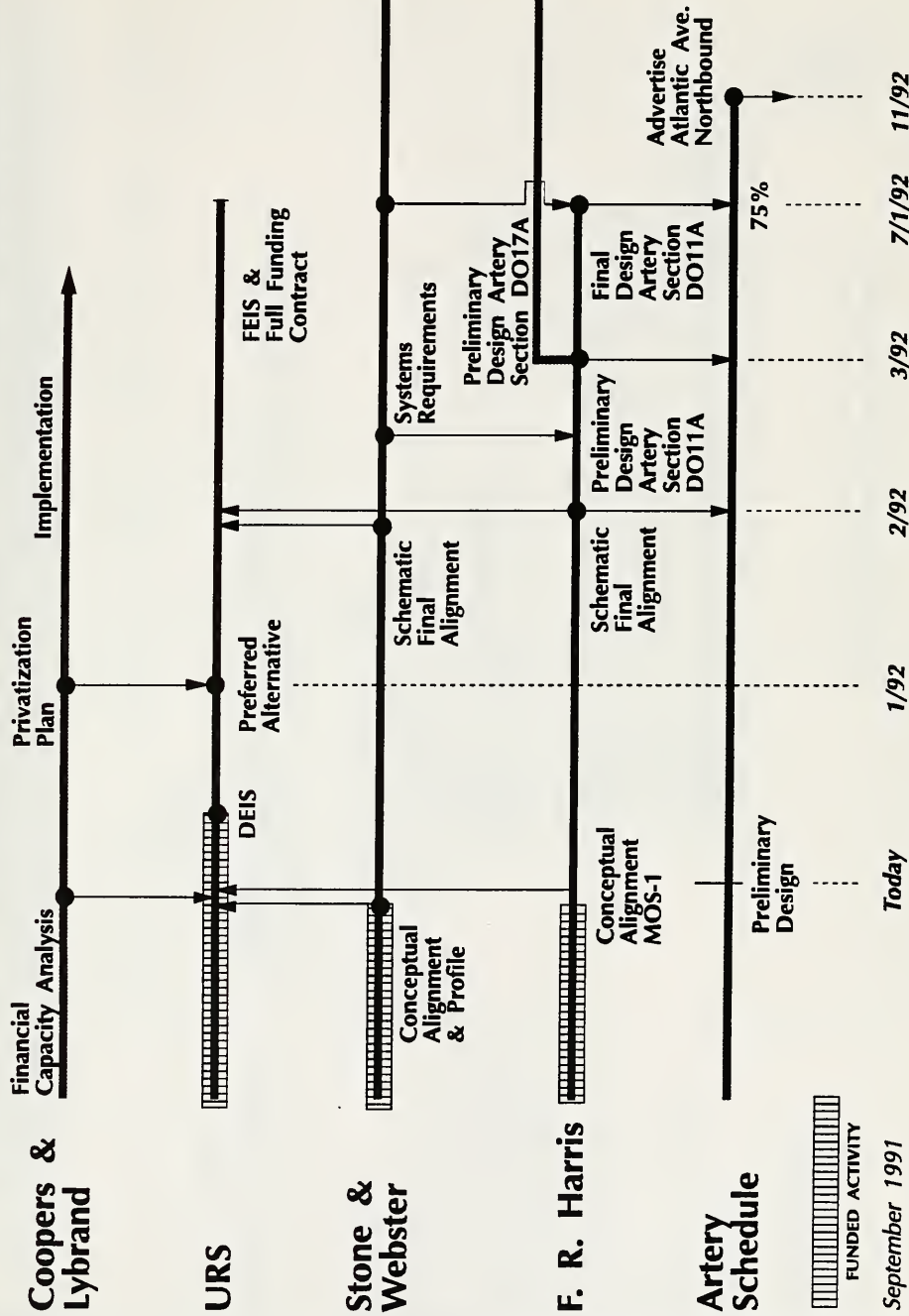


**MBTA SOUTH BOSTON PIEKS/FORT POINT CHANNEL
TRANSIT PROJECT
PROJECT ORGANIZATION
AA/DEIS CONSULTANT TEAM & DESIGN SUPPORT**





TRANSITWAY SCHEDULE REQUIREMENTS - ARTERY COORDINATION





MBTA SOUTH BOSTON PIERS/FORT POINT CHANNEL TRANSIT PROJECT MASTER SCHEDULE - SOUTH STATION TO WORLD TRADE CENTER

MDPW CA/T CONTRACTS

DO11A (INCLUDES MBTA STRUCTURE)

DO17A (INCLUDES MBTA STRUCTURE)

MBTA CONTRACTS

ATLANTIC AVE.

(INCLUDING SOUTH STATION)

FORT POINT CHANNEL CROSSING

SLEEPER ST. TO NEW CONGRESS ST.
(INCLUDING FAN PIER STATION)

MAINTENANCE FACILITY

WORLD TRADE CENTER STATION

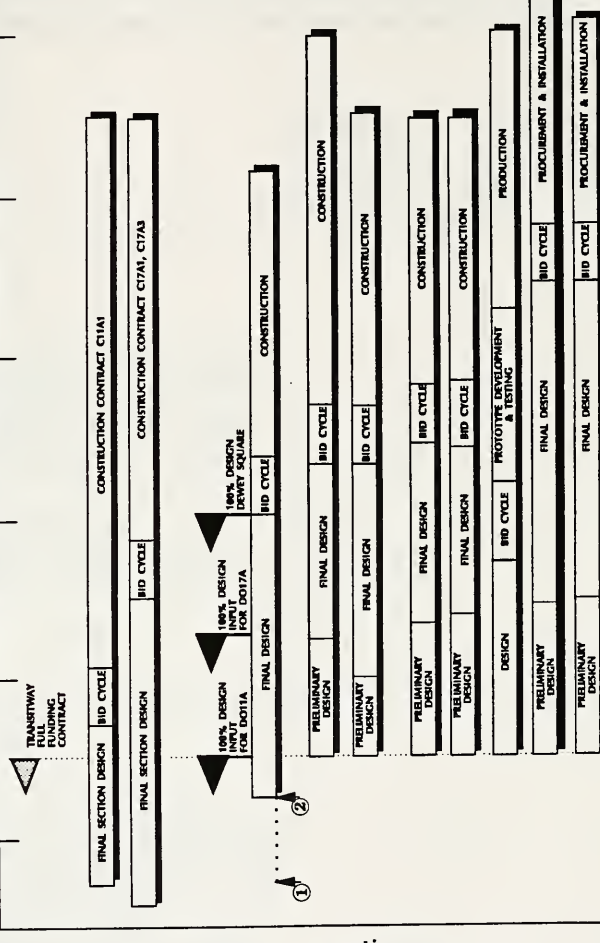
VEHICLES

COMMUNICATIONS & SIGNALS

TRACTION POWER

OPERATIONAL TESTING

1991 1992 1993 1994 1995 1996 1997 1998



- ① BEGIN PRELIMINARY DESIGN FOR DO11A INPUT OCTOBER 1991
- ② BEGIN PRELIMINARY DESIGN FOR DO17A INPUT MARCH 1992

TRANSITWAY COSTS BY SEGMENT

Segment	Millions of 1991 Dollars	Millions of Expenditure Year Dollars
Section 1		
1. Minimum Operable Segment to Fan Pier including buses and maintenance facility	235	272
2. Extension to World Trade Center	66	76
Section 1 Total:	301	348
Section 2		
3. Boylston to South Station including final bus procurement and completion of maintenance facility	199	N/A
Section 2 Total:	199	N/A
TOTAL COST:	500	N/A



FUNDING SUMMARY SHEET

Full Funding Contract Requirement \$348 million

Federal Share (80%) \$278 million

Local Share (20%) \$70 million

Fiscal Year Funding Requirements

	<u><i>Federal</i></u>	<u><i>Local</i></u>
FY92	\$25 million	\$6.25 million
FY93	\$50 million	\$12.75 million
FY94	\$75 million	\$18.75 million
FY95	\$75 million	\$18.75 million
FY96	\$53 million	\$13.25 million

TRANSITWAY PROJECT CASH DRAWDOWN PROJECTION

Assumptions

1. Congress authorizes and appropriates on a schedule consistent with the House Public Works proposed Reauthorization Act.
2. Senators Kennedy/Kerry are able to pass language to make our receipt of UMTA funding retroactive to preliminary engineering.

Under the above conditions, the cash outlay is projected to be:

FY92 FY93 FY94 FY95 FY96 FY97

State	\$2	\$5	\$10	\$10	\$20	\$23
Federal	\$8	\$20	\$40	\$40	\$80	\$90
	\$10	\$25	\$50	\$50	\$100	\$113



PRIVATIZATION PROGRAM

- **Value Capture**
- **Other Private Sector
Roles**

TRANSIT - RELATED BENEFITS

- ☐ **Allows Greater Density While Protecting Environmental and Community Concerns**
- ☐ **Enhances Value of Development**
- ☐ **Creates Parking-Related Benefits**
- ☐ **Generates Property Taxes and Fees**

BENEFIT SUMMARY

**20% Additional
Development \$565M**

**Enhanced Value of Total
Development \$209M**

**Parking-Related Construction
Cost Savings \$203M**

**Property Tax Revenue
and Linkage Fees \$165M**

Total \$1142M

REVENUE - GENERATING MECHANISMS

- ☐ **Betterment Assessments**
- ☐ **Tax Increment Financing**
- ☐ **Density Bonuses**
- ☐ **Parking Fees**
- ☐ **Mortgage Recording Fees**
- ☐ **Impact Fees**

OTHER PRIVATE SECTOR ROLES

- ☐ **Financing of Vehicles**
- ☐ **Turnkey on Vehicle Procurement
& Maintenance Including
Provision of Facilities**
- ☐ **Alternative Debt Financing for
Capital Requirements**
- ☐ **Joint Development/Construction
Opportunities**
- ☐ **Other**

